



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,953	09/22/2006	Yaser S. Abdelsamed	11059-0006US	5430
22902	7590	04/19/2010	EXAMINER	
CLARK & BRODY			GRAMLING, SEAN P	
1700 Diagonal Road, Suite 510				
Alexandria, VA 22314			ART UNIT	PAPER NUMBER
			2875	
			MAIL DATE	DELIVERY MODE
			04/19/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/593,953	ABDELSAMED, YASER S.	
	<b>Examiner</b>	<b>Art Unit</b>	
	SEAN P. GRAMLING	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 1/19/10.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-16 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### ***Amendment***

Acknowledgment is made of Amendment filed January 19, 2010. Claims 1 and 11 are amended. Claim 16 is new. Claims 1-16 are pending.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-9 and 11-16** are rejected under 35 U.S.C. 102(e) as being anticipated by Sales (US 6,910,785).

3. Regarding claim 1, Sales discloses a reflector 40 for a luminaire comprising a shaped wall having a plurality of longitudinal main reflecting prisms 721 circumferentially arranged on the shaped wall in a dome-like configuration and extending substantially the height of the shaped wall, each of the main reflecting prisms having a peak with a predetermined degree of taper (preferably 45 degrees, see Figure 7 and column 8, lines 51-55) positioned between two valleys to provide a light reflection pattern and a plurality of transition reflecting prisms 722 having a peak between two valleys with a first portion (Examiner designates the first portion of the transition prisms 722 as the portion

Art Unit: 2875

corresponding to zones 59-54 in Figure 6) thereof having substantially the predetermined degree of taper between the two valleys over a major part of the shaped wall to provide a light reflection pattern wherein a second portion (Examiner designates the second portion of the transition prisms as the portion corresponding to zone 53) of the peak of each transition prism 722 is contiguous with the first portion and transitions into the valley of a respective main prism in a transition zone (zone 53) having a length that is shorter than the length of the first portion of the respective transition prism 722 (see Figures 1 and 5-7, and column 6, line 66 through column 7, line 13 and column 7, line 59 through column 8, line 64).

4. Regarding claim 2, the main reflecting prisms 721 and transition prisms 722 in Sales are configured to provide internal reflection of light emanating from an interior portion of the luminaire (see column 6, line 66 through column 7, line 13).

5. Regarding claim 3, the shapes of the transition reflecting prisms 722 outside of the transition zone in Sales are substantially the same as the shapes of the main reflecting prisms 721 (see Figures 6, all prisms are substantially triangular).

6. Regarding claim 4, the shaped wall in Sales is rotationally symmetric about a longitudinal axis of the luminaire (see Figure 5).

7. Regarding claim 5, the length of the transition zone (zone 53) is less than about ten percent of the length of the shaped wall (see column 10, lines 7-11).

8. Regarding claim 6, the length of the transition zone (zone 53) is less than about five percent of the length of the shaped wall (see column 10, lines 7-11).

9. Regarding claim 7, the transition zone in Sales can comprise a step (see column 8, lines 36-40 which teaches that the prism elements 722 may be discontinuous along the length of the wall).

10. Regarding claim 8, Sales teaches that in a cross section passing through a longitudinal axis of the shaped wall, the shape of the transition zone is one of linear, parabolic, or stepped (see Figures 5-7 or column 8, lines 36-40).

11. Regarding claim 9, Sales teaches that in a cross section passing through a longitudinal axis of the shaped wall, the shape of the transition zone is circular (see Figures 5-7).

12. Regarding claim 11, Sales discloses a method of making a mold for a reflector 40 comprising the steps of providing a shaped wall, forming the shaped wall a set of grooves corresponding to main prisms 721 circumferentially arranged in the shaped wall in a dome-like configuration and having a predetermined degree of taper (preferably 45 degrees, see Figure 7 and column 8, lines 51-55) extending along substantially the entire length of the wall, forming in the shaped wall a set of grooves corresponding to transition prisms 722 similar in shape to the main prisms with a portion (the portion corresponding to zones 59-54 in Figure 6) having substantially the predetermined degree of taper and interleaved with the main prisms, the transition prisms 722 extending along a major part of the shaped wall and less than the length of the shaped wall (see column 8, lines 36-40 which teaches that the prism elements 722 may be discontinuous along the length of the wall) and forming in the shaped wall grooves corresponding to a transition zone (zone 53) contiguous with the portion of the transition

Art Unit: 2875

prisms 722, the length of the transition zone being less than the length of the portion of the transition prisms 722 (see Figures 1 and 5-7, and column 6, line 66 through column 7, line 13 and column 7, line 59 through column 8, line 64).

13. Regarding claim 12, Sales teaches providing a mold having the configuration of the shaped wall and forming the prisms and transition zone comprising the steps of forming the prisms and the transition zone in the shaped wall and then making a reflector with the mold (see Sales, Figures 13A-13D, and column 11, line 64 through column 12, line 62).

14. Regarding claim 13, Sales teaches that the steps of forming the main and transition prisms in the shaped wall comprise using a single cutting tool or multiple cutting tools of similar shape (see column 12, lines 31-62).

15. Regarding claim 14, Sales teaches that the step of forming the transition zone comprises moving the cutting tool such that a peak of a transition prism merges with a valley between adjacent main prisms (see column 8, lines 36-40 and column 12, lines 31-62).

16. Regarding claim 15, Sales discloses a reflector 40 for a luminaire comprising a wall having one end narrower than an opposite end and having a plurality of main reflecting prisms 721, each of which has a peak between two valleys extending from one end to the opposite end and having substantially uniform configuration along the length and a plurality of transition reflecting prisms 722, each of which has a peak between the two valleys, interleaved with the main reflecting prisms extending from the opposite end toward the one end and terminating at a point spaced from the one end

(see column 8, lines 36-40 which teaches that the prism elements 722 may be discontinuous along the length of the wall), wherein the transition prisms 722 and the main prisms 721 are essentially of identical configurations and contour except when the peak of each transition prism transitions into the valley of a respective main prism in a transition zone, and wherein the transition zone is shorter than the remainder of the transition prism 722 (see Figures 1 and 5-7, and column 6, line 66 through column 7, line 13 and column 7, line 59 through column 8, line 64).

17. Regarding claim 16, the transition prisms 722 in Sales are shorter than the main reflecting prisms 721 (see transition prisms 722 are shorter in width than the main reflecting prisms 721, see Figure 6).

#### ***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Sales* (US 6,910,785).

20. Regarding claim 10, Sales does not specifically teach that the radius of curvature of the transition zone (zone 53) be about three inches. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to specify that the radius of curvature of the transition zone be about three inches in order to have

a similar width of the prisms 72 in the transition area, and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art (*In re Boesch*, 617 F. 2d 272).

### ***Response to Arguments***

21. Applicant's arguments filed January 19, 2010 have been fully considered but they are not persuasive. Examiner respectfully disagrees with Applicant's submission that Sales does not teach that a first portion (designated by Examiner as the portion corresponding to zones 59-54 in Figure 6) of the transition prisms 722 do not have "substantially said predetermined degree of taper over a major part of said shaped wall". Examiner respectfully directs Applicant to column 8, lines 51-55 and Figure 7 which teaches that the peak of the prism elements 72 (main reflecting prisms 721 and transition prisms 722) is "preferably angled at 45 degrees from a radial line 723 extending perpendicular from the central axis of the refractor 40". Accordingly, the first portion of the transition prisms 722 has substantially the predetermined degree of taper (preferably 45 degrees) over a major surface of the shaped wall. The rejections of claims 1-9 and 11-16 under 35 U.S.C. 102(e) as being anticipated by Sales are therefore maintained.

### ***Conclusion***

22. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN P. GRAMLING whose telephone number is (571)272-9082. The examiner can normally be reached on MONDAY-FRIDAY 7:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sean P Gramling  
Examiner  
Art Unit 2875

/SPG/

/Sandra L. O'Shea/  
Supervisory Patent Examiner, Art Unit 2875